

REMARKS

By this Amendment, claims 1, 14, 16, 26, 27, 29 and 41 are amended merely to recite the claimed subject matter without narrowing the scope of any of the claims. No new matter has been added. Accordingly, after entry of this Amendment, claims 1-41 will remain pending in the patent application.

Applicant submits herewith a new Information Disclosure Statement and a new PTO Form 1449 citing DD 224,448 A1 to Hesse *et al.* (hereinafter "Hesse"), along with a copy of its English translation. The Examiner is respectfully requested to initial this reference and sign and date PTO Form 1449 and return it to Applicant's representative with the next communication from the U.S. Patent Office.

Applicant appreciates the Examiner's indication that claims 5-10, 20-25 and 34-37 would be allowable if rewritten in independent form. However, Applicant respectfully submits that claims 5-10, 20-25 and 34-37 are allowable over the art of record for at least the reasons set forth below.

Claims 1-4, 11-19, 26-33 and 38-41 were rejected under 35 U.S.C. §102(b) based on Hesse. The rejection is respectfully traversed.

Claim 1 is patentable over Hesse at least because this claim recites a lithographic projection apparatus comprising, *inter alia*, "an isolator, having at least a portion to allow passage of said beam therethrough, provided between said projection system and said substrate table and mechanically isolated from said projection system and to limit or prevent transmittance of vibrations or forces through the liquid to the projection system." Hesse does not disclose, teach or suggest a lithographic apparatus including this feature. Therefore, Hesse does not disclose, teach or suggest each and every feature recited by claim 1 and, as a result, cannot anticipate claim 1.

Hesse merely discloses an apparatus that includes a first chamber, containing an immersion liquid, that is rigidly attached to the projection lens, and a second chamber, containing an immersion liquid, that is rigidly attached to the wafer table. (*See* FIG. 1 and English translation at page 3, lines 16-26). Hesse teaches that the two chambers are separated from each other and that an immersion liquid can be used to fill the space between the first and the second chambers. (*See* FIG. 1 and English translation at page 5, lines 10-11). However, Hesse is completely silent about an isolator mechanically isolated from the projection system to limit or prevent transmittance of vibrations or forces through the liquid to the projection system. As can be seen in FIG. 1 of Hesse, glass plate 9 (identified as the

“isolator” in the Office Action) and glass plate 5 are respectively mechanically connected to the wafer table 11 and the projection lens 1 and coupled to each other by the intermediary immersion liquid 14. Therefore, neither the glass plate 9 nor the glass plate 5 acts to limit or prevent transmittance of vibrations or forces through the liquid to the projection system. Rather, in Hesse, vibrations or forces through the immersion liquid may be transmitted to the projection system. Therefore, claim 1 is patentable over Hesse.

Claims 2-4 and 11-15 are patentable over Hesse at least by virtue of their dependency from claim 1 and for the additional features recited therein.

Independent claim 16 is patentable over Hesse at least because this claim recites a device manufacturing method wherein, *inter alia*, “projecting a patterned beam of radiation, through an isolator, mechanically isolated from said projection system to limit or prevent transmittance of vibrations or forces through the liquid to the projection system, between said substrate and said projection system and through said liquid, onto a target portion of the substrate.” Hesse does not disclose, teach or suggest a method including this feature. Therefore, Hesse does not disclose, teach or suggest each and every feature recited by claim 16 and, as a result, cannot anticipate claim 16.

As mentioned previously, Hesse merely discloses that the first chamber and the second chamber are separated by a space that is filled with an immersion liquid. In Hesse, neither the glass plate 9 nor the glass plate 5 acts to limit or prevent transmittance of vibrations or forces through the liquid to the projection system. Therefore, claim 16 is allowable over Hesse.

Claims 17-19 and 26-30 are patentable by virtue of their dependency from claim 16 and for the additional features recited therein.

Independent claim 31 is patentable over Hesse for at least similar reasons provided above in connection with claim 1. Namely, claim 31 is patentable over Hesse at least because this claim recites a lithographic projection apparatus comprising, *inter alia*, “a vibration isolator disposed between said first and second liquid portions to inhibit a vibration in said first liquid portion from being transmitted to said second liquid portion.” As mentioned previously, Hesse is completely silent about such a vibration isolator. In Hesse, glass plate 9 which is disposed between liquid 10, which is in contact with the wafer table 11, and liquid 3, which is in contact with the projection lens 1, does not inhibit a vibration in liquid 10 from being transmitted to liquid 3. Rather, in Hesse, vibrations in liquid 10 may be transmitted to liquid 3 via the glass plate 9. Therefore, claim 31 is patentable over Hesse.

Claims 32-33 and 38-41 depend from claim 31 and are, therefore, patentable for at least the same reasons provided above in connection with claim 31, and for the additional features recited therein.

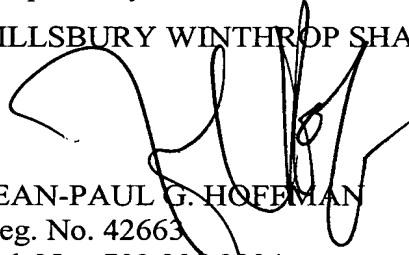
Accordingly, reconsideration and withdrawal of the rejection of claims 1-4, 11-19, 26-33 and 38-41 under 35 U.S.C. §102(b) based on Hesse are respectfully requested.

Applicant has addressed all the Examiner's rejections and respectfully submits that the application is in condition for allowance. A notice to that effect is earnestly solicited. If any point remains in issue which the Examiner feels may be best resolved through a personal or telephone interview, please contact the undersigned at the telephone number listed below.

Please charge any fees associated with the submission of this paper to Deposit Account Number 033975. The Commissioner for Patents is also authorized to credit any over payments to the above-referenced Deposit Account.

Respectfully submitted,

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